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#### **EUROPEAN PATENT APPLICATION**

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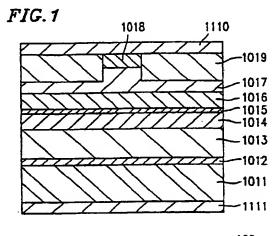
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### (54) Semiconductor light emitting device and method for fabricating the same

In a II-VI group semiconductor laser, on an n type GaAs substrate, n type ZnSe layer, a multiquantum well layer of a ZnCdSe well layer and a ZnSe barrier layer, and a p type ZnSe layer are deposited in this order. A polycrystalline ZnO layer is provided on both sides of the p type ZnSe layer for constricting current. Multifilm reflecting mirrors, respectively constituted with a polycrystalline SiO2 layer and a polycrystalline TiO2 layer, for obtaining laser oscillation are provided on the p type ZnSe layer as well as on a surface of the n type ZnSe layer exposed by etching the GaAs substrate. Furthermore, a p type AuPd electrode and an n type AuGeNi electrode are respectively provided. Alternatively, on an n type GaAs substrate, an n type ZnSe epitaxial layer, an n type ZnMgSSe dadding layer, an n type ZnSSe optical waveguide layer, a ZnCdSe active layer, a p type ZnSSe optical waveguide layer, a p type ZnMgSSe cladding layer, a p type ZnTe contact layer and a polycrystalline ZnO burying layer are respectively formed. Furthermore, a p type AuPd electrode and an n type In electrode are respectively provided.



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# **EUROPEAN SEARCH REPORT**

**Application Number** EP 99 10 2778

Category	Citation of document with ind of relevant passa		Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.CI.7)
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### ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 99 10 2778

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82